UNITED STATES PATENT AND TRADEMARK OFFICE

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10/801,717	03/17/2004	Haruko Kawakami	016907-1623	1861

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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

> A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
> - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
> - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
> - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _11 June 2007_.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _5-15_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _5-15_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some *   c) ☐ None of:

       1. ☐ Certified copies of the priority documents have been received.

       2. ☐ Certified copies of the priority documents have been received in Application No. _____.

       3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____ .

DETAILED ACTION

All of the examiner's suggestions presented herein below have been assumed for examination purposes, unless otherwise noted.

Amendments

1.   This office action is responsive to the claim and specification amendment received on 6/11/2007. **Claims 5 – 15** are pending; **claims 1 – 4** are cancelled; **claims 5 – 9** are amended; and **claims 10 – 15** are new.

Specification

2.   In response to applicant's specification amendments and remarks received on 6/11/2007, the previous specification objections are withdrawn.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   **Claims 5 – 6, 11 – 12, and 14 - 15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi et al. (US 2001/0030759 A1) in view of Shimizu et al. (US 6,609,162 B1).

Regarding **claim 5**, while Hayashi discloses an image processing method (FIG. 1) for

adding information ("embedment apparatus" in paragraph [0013]) to image data ("I" in FIG.1),

comprising:

altering a process (FIG. 1, element 0110; "to determine a pattern arrangement to be

used..." in paragraph [0091]) for adding the information ("...to be used for embedding the

electronic watermark information..." in paragraph [0091]) in accordance with characteristics of

at least one (the printer) of output means ("...represented by...the output resolution of the printer

109..." in paragraph [0091]) of the image data and input means (FIG. 2, element 0201) of the

image data, the characteristics of the output means and the input means being specified based on

both the resolutions of the output means and the input means (the characteristics are based off of

both since the input means (scanner) resolution is dependent off the of resolution of the printer as

disclosed in an example in paragraph [0226] wherein the printer and scanner have a resolution

ration of 1:1), Hayashi does not disclose wherein the characteristics of the output means and the

input means being specified based on the model names of the output means and the input means.

Shimizu discloses a data processing apparatus connected to a network containing a

plurality of devices (FIG. 1) wherein model names ("Device-id;" in FIG. 5 and FIG. 6) of the

output means (FIG. 1, element 102; Col. 6, lines 31 - 61) and the input means (FIG. 1, element

2903; Col. 6, line 64 – Col. 7, line 29) are specifically used for the characteristics ("Resolution;"

in FIG. 5 and FIG. 6) of the output means and the input means.

It would have been obvious to one of ordinary skill in the art at the time the invention

was made for the characteristics of the output means and the input means of Hayashi to be

specified based on the model names of the output means and the input means as taught by

Shimizu "...to provide a data processing apparatus having an improved operability which can use a realizable function via a network as if the function is provided by a single device.", Shimizu, Col. 1, line 66 – Col. 2, line 2.

Regarding **claim 6**, while Hayashi in view of Shimizu discloses the image processing method according to claim 5, Hayashi discloses wherein at least one (the printer) of the output means ("...represented by...the output resolution of the printer 109..." in paragraph [0091) and the input means (FIG. 2, element 0201) is selected by selection means (FIG. 1, element 0110 selects the printer as cited "OUTPUT RESOLUTION OF PRINTER" in FIG. 1), and

a process (paragraph [0091]) for adding the information is performed in accordance with characteristics ("...represented by...the output resolution of the printer 109..." in paragraph [0091]) of the selected output means or the selection input means.

Regarding **claim 10**, while Hayashi discloses an image processing apparatus (FIG. 1), comprising:

a subjecting device (FIG. 1) which subjects image data ("I" in FIG. 1) to a predetermined process (paragraph [0091]) in accordance with a characteristic of information ("...represented by...the output resolution of the printer 109..." in paragraph [0091]), characteristics of the output means and the input means being specified based on both the resolutions of the output means and the input means (the characteristics are based off of both since the input means (scanner) resolution is dependent off the of resolution of the printer as disclosed in an example in paragraph [0226] wherein the printer and scanner have a resolution ration of 1:1);

an adding device (FIG. 1, elements 0105, 0110) which adds the information to the image data that has been subjected to the predetermined process; and

an extracting device (FIG. 2, elements 0202, 0204) which extracts the information from

the image data to which the information has been added; Hayashi does not disclose wherein the

characteristics of the output means and the input means being specified based on the model

names of the output means and the input means.

Shimizu discloses a data processing apparatus connected to a network containing a

plurality of devices (FIG. 1) wherein model names ("Device-id;" in FIG. 5 and FIG. 6) of the

output means (FIG. 1, element 102; Col. 6, lines 31 - 61) and the input means (FIG. 1, element

2903; Col. 6, line 64 – Col. 7, line 29) are specifically used for the characteristics ("Resolution;"

in FIG. 5 and FIG. 6) of the output means and the input means.

It would have been obvious to one of ordinary skill in the art at the time the invention

was made for the characteristics of the output means and the input means of Hayashi to be

specified based on the model names of the output means and the input means as taught by

Shimizu "…to provide a data processing apparatus having an improved operability which can

use a realizable function via a network as if the function is provided by a single device.",

Shimizu, Col. 1, line 66 – Col. 2, line 2.

Regarding **claims 11** and **12**, while Hayashi in view of Shimizu disclose the image

processing apparatus according to claim 10, Hayashi discloses wherein the information is a

frequency component ("high frequency" and "low frequency" in paragraph [0212]; FIG. 5).

Regarding **claim 14**, while Hayashi in view of Shimizu disclose the image processing

apparatus according to claim 10, Hayashi in view of Shimizu does not further comprise an

inputting device which inputs the model names.

Shimizu discloses a data processing apparatus connected to a network containing a

plurality of devices (FIG. 1) that comprises an inputting device (FIG. 2, element 206 "for

transmitting a device profile" (Col. 5, lines 19 – 20) such as those in FIG. 5 or FIG. 6) which

inputs the model names ("Device-id;" in FIG. 5 and FIG. 6).

It would have been obvious to one of ordinary skill in the art at the time the invention

was made for the image processing apparatus of Hayashi in view of Shimizu to further comprise

an inputting device which inputs the model names as taught by Shimizu "…to provide a data

processing apparatus having an improved operability which can use a realizable function via a

network as if the function is provided by a single device.", Shimizu, Col. 1, line 66 – Col. 2, line

2.

Regarding **claim 15**, while Hayashi in view of Shimizu disclose the image processing

apparatus according to claim 10, Hayashi in view of Shimizu does not teach wherein the

inputting device includes a control panel.

Shimizu discloses a data processing apparatus connected to a network containing a

plurality of devices (FIG. 1) that teaches wherein the inputting device (FIG. 2, element 206 "for

transmitting a device profile" (Col. 5, lines 19 – 20) such as those in FIG. 5 or FIG. 6) includes a

control panel (FIG. 2, element 208; Col. 2, lines 24 – 27).

It would have been obvious to one of ordinary skill in the art at the time the invention

was made for the inputting device of Hayashi in view of Shimizu to include a control panel as

taught by Shimizu "…to provide a data processing apparatus having an improved operability

which can use a realizable function via a network as if the function is provided by a single

device.", Shimizu, Col. 1, line 66 – Col. 2, line 2.

5.   **Claim 7** is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi et al. (US

2001/0030759 A1) in view of Shimizu et al. (US 6,609,162 B1) and Sato et al. (US 6,390,598 B2

While Hayashi in view of Shimizu disclose the image processing method according to

claim 5, wherein a resolution of at least one of the output means and the input means are selected

by selection means (refer to references/arguments in claim 5), Hayashi in view of Shimizu does

not teach wherein a tone pattern cycle and direction of at least one of the output means and the

input means selected by selection means.

Sato et al. teaches an image processing method ("Accordingly, an object of the present

invention is to increase image quality without excessively decreasing printing speed.", column 2,

line 23) wherein a resolution ("Resolution conversion module 97 has the role of converting the

resolution (in other words, the pixel count per unit length) of the color image data handled by

application program 95 to resolution that can be handled by printer driver 96.", column 5, line

44), AND a tone pattern cycle and direction of at least one of the output means and the input

means are selected by selection means (The output means is the printer reference numeral 20 and

input means in the scanner reference numeral 80 as shown in FIG. 2. The control circuit

reference numeral 40 may be the same selection means from that disclosed by both Iwamura and

Miyake (refer to the references cited in claim 5)).

Sato et al. discloses "nozzles" as the elements printing and scanning the dots as follows:

"In order to attain the above and the other objects of the present invention, there is provided a

method of printing by forming ink dots on a print medium. The printing method comprises the

steps of providing a print head having a plurality of nozzles arrayed along a sub-scanning

direction for ejecting same ink; allocating n(j) number of nozzles to a j-th main scan line in a

selected area on the print medium where n(j) is an integer of two or more, the integer n(j) for

some main scan lines being set at a different value from that for other main scan lines;

positioning each of the n(j) number of nozzles on the j-th main scan line; and driving each of the

n(j) number of nozzles, in response to given print data, to enable the nozzle to form dots

intermittently at a rate of one in m.times.q dot positions on the j-th main scan line during one

main scan, m being an integer of 1 or more, and q being an integer of 2 or more, to thereby

complete dot formation on the j-th main scan line with the n(j) number of nozzles during n(j)

number of main scans.", column 2, line 27.

According to Sato et al., the tone pattern cycle and tone pattern direction are the nozzle

pattern cycle: "When sub-scan feed amount L gets greater, a nozzle pattern cycle gets longer.",

column 17, line 43 and direction "At the right side of FIG. 5(A) is shown the ordinal number of

the nozzle that records dots on each raster line. With the raster lines drawn by a dotted line

extending in the right direction (main scan direction) from the circles that indicate the sub-

scanning direction position of the nozzles, at least one of the raster lines above or below this

cannot be recorded, so in fact, dot recording is prohibited.", column 7, line 58.).

It would have been obvious at the time the invention was made to one of ordinary skill in

the art for the pattern arrangement determination unit of Hayashi in view of Shimizu to select a

tone pattern cycle and direction of at least one of the output means and the input means as taught

by Sato et al. "...to increase image quality without excessively decreasing printing speed.",

column 2, line 23.

6.   **Claims 8** and **9** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi

et al. (US 2001/0030759 A1) in view of Shimizu et al. (US 6,609,162 B1) and Trelewicz et al.

(US 6,912,674 B2).

Regarding **claim 8**, while Hayashi in view of Shimizu disclose the image processing

method according to claim 5, Hayashi in view of Shimizu does not teach further comprising:

printing out a test pattern in advance by output means that is used; reading the test pattern by

input means; and altering a process for adding the information in accordance with a result of

reading.

Trelewicz et al. teaches an image processing method ("...a method triggers a printer to

initiate an embedding algorithm...", column 1, line 44) comprising:

printing out a test pattern in advance by output means that is used ("A number of events

may trigger the process to begin. For example, the printer 106 may be configured to run a self-

analysis application at certain time intervals. Alternatively, a customer or technician could be

experiencing problems with the printer and manually requests a test page to be printed by

pushing a "test page" button.", column 4, line 64.);

reading the test pattern by input means ("The printed data may later be scanned, run

through analysis software, and the embedded data is returned. The embedded data can then be

used to diagnose printer problems or to serve as a digital notary.", column 1, line 48.); and

altering a process for adding the information in accordance with a result of reading ("The

controller/processor unit 208 encodes this information, at step 306 and inserts it into the page to

be printed by one of several methods. There are two basic methods of embedding data, which

may be used independently of each other, or in combination. In the first method, the pels

themselves may be modified, through the addition or subtraction of pels near existing pel groupings in the image, for which there is existing technology on the method of embedding so that the perceptual print quality is not affected. In the second, the printer 106 may make selective use of toners or inks 212 with different properties e.g., a toner or ink 212 with detectable magnetic properties may be used in specific areas, so that the appearance of the print is unchanged, but a magnetic scanner will be able to detect the underlying pattern.", column 3, line 60. Since there exists multiple methods for adding the embedded data before printing, it is inherent that reading the result may in itself conclude the need for another method for adding the embedded data.).

It would have been obvious to one ordinary skilled in the art the time the invention was made for the image processing method of Hayashi in view of Shimizu to further comprise: printing out a test pattern in advance by output means that is used; reading the test pattern by input means; and altering a process for adding the information in accordance with a result of reading a taught by Trelewicz et al. so that "[t]he embedded data can then be used to diagnose printer problems or to serve as a digital notary.", Trelewicz, column 1, line 50.

Regarding **claim 9**, while Hayashi in view of Shimizu and Trelewicz disclose the image processing method according to claim 8, Hayashi in view of Shimizu and Trelewicz does not teach wherein the test pattern is a patch or a tone pattern, which includes at least an intermediate level.

Trelewicz et al. discloses an image processing method ("...a method triggers a printer to initiate an embedding algorithm...", column 1, line 44) that teaches a test pattern as a patch or a tone pattern (refer to reference cited in claim 8, in specific "...selective use of toner..." which

reads on "tone pattern"), which includes at least an intermediate level (refer to reference cited in

claim 8, in specific "...with detectable magnetic properties may be used in specific areas..."

which reads on "at least an intermediate level").

It would have been obvious to one ordinary skilled in the art the time the invention was

made for the test pattern of Hayashi in view of Shimizu and Trelewicz to be a patch or a tone

pattern, which includes at least an intermediate level as taught by Trelewicz et al. "...to detect

the underlying pattern.", column 4, line 6.

7.   **Claim 13** is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi et al.

(US 2001/0030759 A1) in view of Shimizu et al. (US 6,609,162 B1) and Macy et al. (US

6,823,455 B1).

Regarding **claim 13**, while Hayashi in view of Shimizu disclose the image processing

apparatus according to claim 10, Hayashi in view of Shimizu does not teach wherein the

predetermined process eliminates, from frequency characteristics of the image data, a frequency

characteristic that is possibly confused with the information.

Macy et al. teaches an image processing method ("...a platform and corresponding

method to produce and embed a digital watermark having enhanced invisibility, detection

reliability, and/or robustness.", column 4, line7), wherein the predetermined process eliminates,

from frequency characteristics of the image data, a frequency characteristic that is possibly

confused with the information ("As an option, the sub-frame may undergo a filtering scheme to

partially remove noise contributed by the original image in order to further enhance detection

reliability of the watermark. This noise abatement filtering scheme involves subtraction of a

computed local mean signal value of pixels within the frame (1030).", column 9, line 43.).

It would have been obvious at the time the invention was made to one of ordinary skill in

the art for the predetermined process of Hayashi in view of Shimizu to teach an image processing

method wherein the predetermined process eliminates, from frequency characteristics of the

image data, a frequency characteristic that is possibly confused with the information as taught by

Macy et al. "…to partially remove noise contributed by the original image in order to further

enhance detection reliability of the watermark", Macy et al., column 9, line 44.

Response to Arguments

9.   Applicant's arguments filed on 6/11/2007 with respect to **claims 5, 6 – 9, 10,** and **11 – 15**

have been respectfully and fully considered, but they are not found persuasive.

Summary of Remarks regarding **claim 5**:

(i) Applicant argues that according to one embodiment of the present invention as recited

in amended independent claim 5, *the characteristics of the output means and the input means*

is specified based on model names of the output means and the input means (@ response page

7) – thus submitting that none of the cited references teaches or suggests the claimed feature or

provides the corresponding benefit discussed above and putting claim 5 in condition for

allowance along with dependents therefrom (@ response page 8).

(ii) Applicant argues that the proffered motivation to combine Miyake and Iwamura (in

stating that it would have been obvious to combine Miyake and Iwamura "to precisely read the

dot information of the print...," citing Miyake at paragraph 89, lines 4 and 5) does not mean that

the ordinary artisan would have incorporated the step of altering a process for at least one of the

output means and the input means of the image data. In addition, there is no evidence that the

results achieved by combining the step of altering a process for at least one of the output means

and the input means of the image data, e.g., to effectively reduce the possibility of degradation of

the digital watermark, was "predictable." Because of the lack of suggestion or motivation in the

prior art to modify the reference, the first requirement of MPEP §2143 has not been met and,

hence, a *prima facie* case of obvious ness has not been established (@ response page 10).

Examiners Response:

(i) Though amended claim 5 read over the prior art due to the limitation of adding the

characteristics of the output means and the input means being specified based on model names of

the output means and the input means, it has been shown that Hayashi in view of Shimizu

anticipate claim 5 as disclosed above. Though Hayashi teaches the characteristics of the output

means and the input means being specified based on both the resolutions of the output means and

the input means, it would have been obvious to one of ordinary skill in the art at the time the

invention was made for the characteristics based on resolutions as taught by Hayashi to disclose

model names as taught by Shimizu. Shimizu teaches a direct correlation between model names

and resolutions supported by the input and output means in its "device profile" as shown in FIG.

5 for the scanner and FIG. 6 for the printer, as one could easily associate the printer resolutions

used the pattern arrangement determining unit element 0110 of Hayashi with just the actual

printer model name as shown by Shimizu. The conjunction "**and**" between the input and output

means is also supported by Hayashi in view of Shimizu as Hayashi discloses a direct correlation

between the resolution of the printer and the scanner in an example of a 1:1 ratio given in

paragraph [0284] of Hayashi. The ratio supports the input of the printer resolution by element

0110 of Hayashi knowing there exists an equal resolution in the scanner element 0201 of

Hayashi. In addition to this, it is obvious to one of ordinary skill in the art to have the one

resolution of one means to be at least twice the other (for whichever is performing first) due to

the Nyquist thereom – thus again resulting in dependency from one means to the other.

(ii) Amended independent claim 5 is anticipated Hayashi in view of Shimizu and thus any

arguments with respect to motivation to combine Miyake and Iwamura under claim 5 and its

dependents have been rendered moot (although it has been respectfully considered to inform the

applicant the motivation behind Hayashi in view of Shimizu in detail). As shown above, though

Hayashi teaches the characteristics of the output means and the input means being specified

based on both the resolutions of the output means and the input means, it would have been

obvious to one of ordinary skill in the art at the time the invention was made for the

characteristics based on resolutions as taught by Hayashi to use model names as taught by

Shimizu "…to provide a data processing apparatus having an improved operability which can

use a realizable function via a network as if the function is provided by a single device.",

Shimizu, Col. 1, line 66 – Col. 2, line 2. Shimizu is clearly suggesting that a network with a

plurality of electronic devices (of which could include a printer and scanner as disclosed by

Hayashi) can improve operability using a realizable function as if the function is provided by a

single device, along with the network including creating device profiles for each electronic

device (element 206 of Shimizu). Each device profile (FIG. 5 for the scanner and FIG. 6 for the

printer in Shimizu) consists a direct correlation between the model name for that particular

electronic device and its capable resolutions. Hayashi bases its method for adding information to image data off of the capable resolutions of its printer (**and** thus scanner as disclosed in paragraph [0284] of Hayashi), and it would have been obvious to one of ordinary skill in the art at the time the invention was made for the pattern arrangement determining unit element 0110 of Hayashi to use a model name instead as taught by the device profiles of Shimizu to improve operability in a network with a plurality of electronic devices. The first requirement of MPEP §2143 has been met and, hence, a *prima facie* case of obviousness has been established with Hayashi in view of Shimizu.

Summary of Remarks regarding **claims 6 – 9:**

(i) Applicant argues that since independent claim 5 is allowable, claims 6 – 9 are allowable by virtue of their direct/indirect dependence from allowable claim 5 and for containing other patentable features (@ response page 8).

(ii) Applicant argues that even if the first requirement of MPEP §2143 is satisfied, the third requirement of MPEP §2143 is not satisfied, since the cited references do not teach each and every element of the present invention.

Examiners Response:

(i) It has been shown above that amended independent claim 5 is anticipated by Hayashi in view of Shimizu and thus the dependent claims are not non-obvious and new.

(ii) The third requirement of MPEP §2143 (among the first two) are satisfied since it has been shown that the cited references above teach each and every element of the present invention.

Summary of Remarks regarding **claim 10:**

Applicant argues that new independent claim 10 is an apparatus claim directed to a device that practices the method of claim 5 and includes the same patentable feature discussed above. Thus, for substantially the same reasons advanced above with respect to independent claim 5, claim 10 is also allowable (@ response page 10).

Examiners Response:

For the same reasons given in claim 5, claim 10 is anticipated by Hayashi in view of Shimizu since claim 10 is an apparatus claim directed to a device that practices the method of claim 5 and includes the same features discussed above. Thus, claim 10 is not allowable with considerably the same reasons given above with respect to independent claim 5.

Summary of Remarks regarding **claims 11 – 15:**

Applicant argues that since independent claim 10 is allowable, claims 11 – 15 are allowable by virtue of their direct/indirect dependence from allowable claim 10 and for containing other patentable features (@ response page 10).

Examiners Response:

It has been shown above that amended independent claim 10 is anticipated by Hayashi in view of Shimizu and thus the dependent claims are not non-obvious and new.

Conclusion

8.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to David P. Rashid whose telephone number is (571) 270-1578.

The examiner can normally be reached on 7:30 - 17:00.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to David P. Rashid whose telephone number is (571) 270-1578.

The examiner can normally be reached Monday - Friday 8:30 - 17:00 ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Brian Werner can be reached on (571) 272-7401. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David P. Rashid/
Examiner, Art Unit 2624

David P Rashid
Examiner
Art Unit 2624

/Brian P. Werner/
Supervisory Patent Examiner (SPE), Art Unit 2624